

## MECKLENBURG COUNTY

Land Use and Environmental Services Agency Code Enforcement

CODE INTERPRETATION

# Commercial Building

**Code Volume Reference:** NC Building Code (2012)

Code Chapter Reference: 1004.1, 1004.2

**Subject:** Occupant Load for Escape Rooms

Effective Date: Sep 26, 2016

Prepared/Revision Date: Sep 26, 2016

**QUESTION:** How is the occupant load determined for "Escape Rooms?"

#### CODE:

1004.2 Increased occupant load. The occupant load permitted in any building, or portion thereof, is permitted to be increased from that number established for the occupancies in Table 1004.1.1, provided that all other requirements of the code are also met based on such modified number and the occupant load does not exceed one occupant per 7 square feet (0.65 m²) of occupiable floor space. Where required by the building official, an approved aisle, seating or fixed equipment diagram substantiating any increase in occupant load shall be submitted. Where required by the building official, such diagram shall be posted.

## **INTERPRETATION:**

Mecklenburg County Code Enforcement's determination on how to look at spaces providing an "escape room" experience depends on several factors that hinge on how the Owner & the Owner's

Architect intend to create the experience. We will perform a plan review to evaluate the design, but here are the general parameters for Occupancy Classification:

- 1. If the experience requires participants to be locked in a room without a means to override the lock themselves per the 2012 NC Bldg Code, section 1008.1.9 or its sub-sections, then the space would have to be designed as an <a href="I-3 Occupancy">I-3 Occupancy</a> and meet <a href="all">all</a> the req'mts for that occupancy class. This is the same Occ Class used for institutional bldgs like prisons & correctional facilities.
- 2. If the experience involves creating a setting that intentionally disguises the means of egress or obscures it from being readily apparent for any reason, then it would be considered a <u>Special Amusement</u> space per section 411 of the 2012 NC Bldg Code and meet <u>all</u> the req'mts of that section. The Occupancy Classification would be A-3 (assembly) unless the occupant load was less than 50 people, in which case it would be considered a B (business) Occupancy.
- 3. If the experience does not meet the definition of a Special Amusement space AND provides a means of egress complying with the 2012 NC Bldg Code, section 1008.1.9 or its subsections, then it would still be an A-3 (assembly) unless the occupant load was less than 50 people, in which case it would be considered a B (business) Occupancy.
  - One possible egress arrangement fitting this description could be providing two
    exits out of the space; one that is always unlocked or has a delayed egress lock, and
    the other that is locked & operable w/ a key or device related to the escape room
    game scenario. Labeling & signage for the exit would be req'd at the door always
    unlocked.

The function of the rooms in which these escape games occur is more akin to an activity or recreation function like an exercise room, karate/dance studio, or a pool, rather than an office environment. The occupant load factor for the preceding types of activity areas is 50 sq.ft. per occupant per Table 1004.1.1. Since it is understood that teams or groups participating in these escape games are typically allowed a maximum size of 10 people, the 50 sq.ft./occ load factor is being modified at the discretion of the Bldg Code Administrator, per 1004.2, to increase the allowable occupants in those specific rooms. The occ load factor for the escape rooms where the game occurs will be set at 35 sq.ft. per occupant. For example a 22'x 20' room has 440 sq.ft. and would yield a max occ load of 13 people @ 35 sq.ft./occ.

All other req'mts of the code (# of exits, egress width, # of restrooms, etc.) will be based on the occ load derived from the use of this modified load factor.

The min req'd number of restroom fixtures will be calculated using the A-3 category for libraries, arcades, & museums found in Table 2902.1. This will apply even if the Occupancy Classification is considered I-3 or B.

Approved By:		
	Jeff Vernon, Building Code Administrator	

Prepared by: Consistency Team



## MECKLENBURG COUNTY

Land Use and Environmental Services Agency Code Enforcement

CODE INTERPRETATION

## **Building**

**Code Volume Reference:** NC Building Code (2012)

NC Plumbing Code (2012)

Code Chapter Reference: 1004 NCBC, 403.1 NCPC

Subject: Occupant Load for Salons (Beauty and Nail)

Effective Date: 1/1/2017

**Prepared/Revision Date:** October 2016

#### CODE:

**1004.1.1 (NCBC)** Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.1. For areas without fixed seating, the *occupant load* shall not be less than that number determined by dividing the floor area under consideration by the occupant per unit of area factor assigned to the occupancy as set forth in Table 1004.1.1. Where an intended use is not listed in Table 1004.1.1, the *building official* shall establish a use based on a listed use that most nearly resembles the intended use.

**1004.2 (NCBC) Increased occupant load.** The *occupant load* permitted in any building, or portion thereof, is permitted to be increased from that number established for the occupancies in Table 1004.1.1, provided that all other requirements of the code are also met based on such modified number and the *occupant load* does not exceed one occupant per 7 square feet (0.65 m2) of occupiable floor space. Where required by the *building official*, an *approved aisle*, seating or fixed equipment diagram substantiating any increase in *occupant load* shall be submitted. Where required by the *building official*, such diagram shall be posted.

**403.1 (NCPC) Minimum number of fixtures.** In new construction or building additions and in changes of occupancy as defined in the *North Carolina Building Code*, plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 403.1. Types of occupancies not shown in Table 403.1 shall be considered individually by the code official. The number of occupants shall be determined by the

International Building Code. Occupancy classification shall be determined in accordance with the International Building Code.

## INTERPRETATION:

Salons are classified as a "Business" under the Building Code. The occupant load for the a "B" is 1/100 occupant/sq ft as determine in section 1004 of the NCBC. This works for most "B" occupancies. The density of a salon in many cases is greater than an office environment (i.e.; a 2000 sq ft nail salon can easily have 40 stations).

The occupant load shall be calculated by the **greater** of the following methods:

- 1. Standard occupant calculation per section 1004 NCBC
- 2. Count each station<sup>1</sup> and multiple by 1.25 (one customer per station and 1 employee per 4 stations) plus lobby/waiting areas at 1/15 occupant/sq ft
- 1. Nail station, pedicure chair, shampoo sink, barber chair or styling chair

Prepared by:

Approved By:

Jeff Vernon, MCP,CBO, Building Code Administrator